

NOTES ON A SMALL COLLECTION OF TERRESTRIAL SHELLS  
FROM ANGOLA, WITH DESCRIPTIONS OF NEW SPECIES.

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THE material on which the following notes are based was collected by Dr. W. G. Ansoerge at a point about two hundred miles due east of Loanda, in Angola. Considering the enormous area of this Portuguese dependency, comprising as it does some 200,000 square miles of more or less unexplored territory, it is surprising what a very little is at present known of its terrestrial mollusca, as, with the exceptions of Morelet's work<sup>1</sup> and a few scattered papers chiefly concerning non-testaceous molluscs, scarcely any work has hitherto been done with regard to this branch of its fauna. Unfortunately the present collection, doubtless owing to the limited time at the disposal of the collector, is very small; but, though it only includes in all about a dozen species, six of these appear to be new to science.

A part of the collection in question has been acquired by the British Museum and the remainder by myself, and I am much indebted to Mr. Edgar A. Smith for kindly placing in my hands for identification that portion secured by his department, and also for much valuable help in working out the material.

ENNEA ANSORGEI, n.sp.

Shell cylindrically ovate, somewhat thin, glossy, yellowish white; spire moderately obtuse at the apex; whorls 7, convex, sculptured, with oblique, slightly arcuate, closely set, transverse costulæ, the last whorl strangulate; sutures impressed; perforation scarcely apparent; columella broad, oblique; labrum white, polished, expanded, bulging inwards on the right side, the margins connected by a broad, thin,



scarcely perceptible, glossy callus, through which the transverse sculpture is easily visible; the parietal wall bearing on the right side a strong, erect, white, vertical lamella; the outer wall bearing, as the result of strangulation, two strong, white lamellæ; aperture obliquely subquadrate.

Alt. 5.25, diam. maj. 2.75 mm.; aperture, alt. 1, diam. 1 mm.

*Hab.*—Two hundred miles due east of Loanda, Angola. Type in British Museum.

<sup>1</sup> "Voyage du Dr. Friedrich Welwitsch dans les Royaumes d'Angola et de Benguella," Mollusques, 1868.

The collection included four specimens of this very pretty little species.

*ENNEA RINGICULA*, Morelet.<sup>1</sup>

Two examples were collected, which, though considerably smaller than the type-specimen in the British Museum, after careful examination I am able to refer to this species; they have both been acquired for the national collection.

*ENNEA ROSENBERGIANA*, n.sp.

Shell ovate, solid, rimate, pale brownish-yellow; spire very obtuse; whorls 8, flat, the first  $2\frac{1}{2}$  smooth, the later whorls sculptured with somewhat fine, oblique, closely set, transverse riblets, the last whorl ascending in front, strangulate towards the base; sutures incised, slightly crenellated by the apices of the transverse riblets; umbilicus reduced to an elongate narrow chink; columella slightly oblique, bearing a strong sickle-shaped fold or plait, within the curve of which appears a small denticle; labrum white, polished, expanded, and reflexed, except near the point of insertion with the whorl above, the



margins connected by a broad, shining, parietal callus; parietal wall bearing a single, very elongate, wavyly curved lamella, somewhat erect behind, then sloping away, and finally becoming very erect in front; outer wall bearing, as a result of strangulation, two or three revolving lamellæ, the first or upper one being sometimes obsolete or totally absent; aperture irregularly quadrate, the right and left sides sloping towards one another. Alt. 10·5, diam. maj. 5·25 mm.; aperture, alt. 3, diam. 2·25 mm.

*Hab.*—Two hundred miles due east of Loanda, Angola.

A good series of specimens were collected, which, with the exception of the occasional total or partial absence of the first lamella on the outer wall, show practically no other variation; among these were a number of scarcely half-grown individuals in which the umbilicus is circular, deep, and moderately wide.

Two immature specimens of what would appear to be another form of *Ennea* also occurred, but as they are both obviously only half-grown it would be quite useless to give any detailed description of them.

<sup>1</sup> "Voyage du Dr. F. Welwitsch dans les Royaumes d'Angola et de Benguella," 1868, pp. 80-1.

## HELICARION WELWITSCHI, Morelet.

A number of specimens, in all stages of growth, were obtained; they are quite typical, and present scarcely any variation.

## HELICARION sp. (?).

Five specimens, probably all immature.

## THAPSIA INNOGENS, n.sp.

Shell discoidal, depressed, thin, hyaline, polished, light yellowish-brown horn colour; whorls 8, regularly increasing in size; sutures impressed, narrowly margined below; perforation moderately wide; labrum simple, acute; aperture broadly, obliquely sublunate. Alt. 2.5, diam. maj. 5.25 mm.; aperture, alt. 1.5, diam. 2 mm.



*Hab.*—Two hundred miles due east of Loanda, Angola.

Eleven specimens; allied to *Helix cerea*, Gould,<sup>1</sup> from Cape Palmas, Liberia, but smaller, darker in colour, more depressed, and rather more closely coiled, the perforation is also wider, and the sutures are narrowly margined, which is not the case with *H. cerea*.

## CERASTUS DELICATULA, n.sp.

Shell small, thin, elongately turbinate, pale brown; apex flattened; whorls 7, rather convex, sculptured with fine, closely set, somewhat oblique, transverse costulae, which become obsolete on the base, last whorl bearing a blunt thread-like carina below the periphery; sutures well impressed; umbilicus narrow, deep, partly concealed by the reflection of the columella; columella descending vertically; labrum simple; aperture ovate. Alt. 8, diam. maj. 4.75 mm.; aperture, alt. 3, diam. 2 mm.



*Hab.*—Two hundred miles due east of Loanda, Angola.

Seven adult specimens and a number of young in various stages of growth. The species may be likened to a miniature *C. Abyssinicus*, Rüppell, from Abyssinia, Central India, etc.

## RACHIS ELECTRINUS, Morelet.

One adult and one very immature specimen.

<sup>1</sup> Proc. Bost. Soc. Nat. Hist., 1850, vol. iii, p. 194.

ACHATINA BANDEIRANA, Morelet.

Two specimens of this fine species were secured which agree well with Pfeiffer's figure in the *Novitates Conchologicae*.<sup>1</sup> Morelet's figure<sup>2</sup> seems to be that of a rather young shell; having had an opportunity of examining the series of this species in the British Museum I think there can be little doubt that *A. Bandeirana* and *A. Dohrniana*, Pfr., are synonymous.

HOMORUS MANUELI, n.sp.

Shell thin, subulate, polished, shining, brown; whorls 12, the earlier whorls mammillary, the later regularly increasing in size, flattish, sculptured with fine transverse costulae which are more in evidence in the sutural regions; sutures impressed, very narrowly margined below; columella whitish, scarcely curved, obliquely truncate, diffused into a thick, well-defined, white, unpolished callus which reaches the lip above; labrum thin, acute; aperture broadly, inversely auriform. Alt. 19, diam. maj. 4.5 mm.; aperture, alt. 3, diam. 1.75 mm.



*Hab.*—Two hundred miles due east of Loanda, Angola.

The collection included a fine series of this shell, which differs from *Achatina nigella*, Morel.,<sup>3</sup> from Pungo Andongo, Angola, about 120 miles to the south-east of the locality whence the present species was obtained, in being considerably larger, having one whorl more, and in the sculpture being much less pronounced; the columella also is not nearly so arched, and is not abruptly truncate as in that species.

PSEUDOGLESSULA MINUSCULA, n.sp.

Shell small, imperforate, dark brown; whorls 9, moderately convex, sculptured with strong, oblique, transverse costulae, the last whorl bearing a subperipheral carina; sutures impressed; columella white, arched, abruptly truncate, a thickish, well-defined

<sup>1</sup> *Novit. Conch.*, vol. iv, pl. cix, figs. 1, 2.

<sup>2</sup> "Voyage du Dr. F. Welwitsch dans les Royaumes d'Angola et de Benguella," pl. vi, fig. 1.

<sup>3</sup> *Ibid.*, pp. 80-1.

callus joining it with the lip above; labrum thin, acute; aperture ovate. Alt. 8.5, diam. maj. 2.5 mm.; aperture, alt. 1.5, diam. 1 mm.



*Hab.*—Two hundred miles due east of Loanda, Angola.

Type in British Museum.

A very beautiful little species, of which only two specimens were obtained, both being in the British Museum.

*AFERULUS INTERMEDIUS*, Martens,<sup>1</sup> var. *ANGOLENSIS*, n.var.

Separable from the typical form by its closer coiling, narrower body-whorl, somewhat wider and more circular aperture, and by the reflection of the columellar lip; though banded it is also separable from the var. *cingulatus*, Dupuis & Putzeys,<sup>2</sup> by the above characters. Alt. 15 mm., diam. maj. 17, min. 13 mm.; aperture, alt. 9, diam. 8.5 mm.

*Hab.*—Two hundred miles due east of Loanda, Angola.

The above variety is described largely upon geographical grounds; the species would appear to have a very wide range; the typical form from Uganda is unicolorous, though the banded form described as var. *cingulatus*, from Nsendwe on the Upper Congo, also occurs in the former region. Taking into account its present occurrence within 200 miles of the Atlantic seaboard it would thus seem to range some 1400 miles in a west-south-westerly direction.

Among other specimens of the genus in the British Museum are two sets, one from Uganda, the other from Ruwenzori, labelled *A. elatior*, v. Mrts.<sup>3</sup> After a careful examination I cannot but think, however, that these are other than *A. intermedius*, var. *cingulatus*; the latter set have been recently recorded under the name of *elatior* in Mr. E. A. Smith's paper on the Ruwenzori Expedition.<sup>4</sup>

<sup>1</sup> Von Martens in *Deutsch Ost Africa*, vol. iv, p. 8.

<sup>2</sup> *Bull. Soc. Roy. Malac. Belgique*, 1901, pp. xli, xlii.

<sup>3</sup> *Sitzungsberichte der Ges. naturf. Freunde zu Berlin*, 1892, p. 180.

<sup>4</sup> *Trans. Zool. Soc. London*, vol. xix, pt. i, p. 47.